

ABSTRACT

A system and method for reducing peak power of a laser pulse and reducing speckle contrast of a single pulse comprises a plurality of beamsplitters, mirrors and delay elements oriented to split and delay a pulse or pulses transmitted from a light emitting device. The design provides the ability to readily divide the pulse into multiple pulses by delaying the components relative to one another. Reduction of speckle contrast entails using the same or similar components to the power reduction design, reoriented to orient received energy such that the angles between the optical paths are altered such that the split or divided light energy components strike the target at different angles or different positions. An alternate embodiment for reducing speckle contrast is disclosed wherein a single pulse is passed in an angular orientation through a grating to create a delayed portion of the pulse relative to the leading edge of the pulse.